

REMARKS

Applicants respectfully request reconsideration and continued examination of this application in view of the above amendment and the following remarks.

1. Status of the Claims

Claims 1-31 are pending. Claims 13-15, 18-20 and 31 have been amended to more precisely point out the applicant's invention. Claim 27 has been amended to correct dependency. New dependent Claims 32-37 and new independent Claim 38 have been added to further recite subject matter considered to comprise the Applicant's invention. Support for the amendments to Claim 1 is found at page 7, line 5, numbered paragraph 29 of the published application and to Claims 13-15, 18-20 and 31 is found at page 8, lines 13-15, paragraph 34 of the published application, and for new Claims 32-38 at paragraph 29 and Claim 1 of the originally filed application. No new matter is added.

2. 35 U.S.C § 112 Rejections

Claims 1-9 and 21-31 were rejected under 35 U.S.C. § 112 for lack of enablement. In particular, the Office Action states that the prior art, flat vacuum panels were necessarily accompanied by structures such as ribs, raised or recessed areas, etc. to make a bottle sufficiently strong structurally. However, the Examiner contends that "it is not clear what in the invention allows one to employ prior art flat panels without the prior art additional structure...."

The following comments clarify the invention as disclosed and claimed. It is respectfully submitted that in view of the above amendments and the comments below, and of the specification as originally filed, there exists adequate enablement to practice the presently claimed invention.

As amended, the claims recite a means for isolating the panels of the body portion from both the bell portion and the base, in accordance with the original disclosure, and which means are further recited in new Claims 32-38 as comprising the first and second elevated ridges. The disclosure at page 6, last

paragraph through page 7, first paragraph, disclosed that the first and second elevated ridges provide the means "to isolate the panel section and to allow the panel sections to act as vacuum panels."

The bell portion or area 13 of the container is described at page 6, lines 11 through page 7, line 10, (numbered paragraphs 28 and 29 of the published application), as providing an acceptable top load rating (about 80 pounds), and "the bell area is able to provide sufficient strength so that it is not necessary for the body portion to provide a means for supporting a top load weight which could include indents, detents, protruding surfaces and/or recessed surfaces." In other words, the first means to isolate the portions, i.e., first elevated ridge 20 and elevated ridge 24, now recited in independent Claim 1 and in dependent Claims 32-37 and independent Claim 38, together with the bell area 13, provide sufficient structural features for achieving the desirable functions of the invention.

As described and claimed, the body portion of the container has the capability to provide the necessary structure to maintain the shape of the container during hot filling by permitting the panels to move from the bowed to the planar configuration as the hot filled liquid cools and thereby contracts in volume. Additional description of the container structure, including the four panel construction that eliminates recesses, indents, etc., is set forth in numbered paragraphs 29-37 of the published application, to which reference is made for a better understanding of the inventive features, now recited in Claims 1 and 38, of the application "in order to reduce the negative pressure during product cooling."

The above amendments and explanation is considered to have provided the required clarification so as to overcome the rejection under 35 U.S.C. § 112, first paragraph.

3. 35 U.S.C. § 103(a) Rejections of Claims 1-9

Claims 1-5 and 9 were rejected under 35 U.S.C. §103(a) as being unpatentable over Hayashi in view of US Patent No. 4,749,092 to Sugiura et al ("Sugiura"), further in view of US Patent Nos. 5,238,129 to Ota ("Ota") and 5,740,934 to Brady ("Brady"). Claims 2-9 depend upon claim 1. Claims 6-8 were

rejected as being unpatentable for the reasons given for claim 1, and relying on additional references. Thus, rejection of Claims 2-9 ultimately rely on the finding that Claim 1 is obvious, which reliance is shown below to be improperly founded.

In rejecting Claim 1, the combination of Hayashi with Sugiura and Brady is relied upon. The Office Action states that Sugiura "teaches the application of flat panels for absorbing pressure changes brought on by hot filling" and that Brady is "further evidence of flat pressure deflecting panels without any additional structure elements." It is asserted that Hayashi can be combined with Sugiura and Brady to show that it is obvious to have a bottle whose four panel sections "exhibit flexibility to move between a bowed and planar configuration in response to temperature changes..." Claim 1.

The rejection of Claims 1-5 and 9 is respectfully traversed for several reasons. First, Claim 1 has been amended to now recite a means for isolating the four flat panel sections of the main body portion from the bell portion and from the base. None of the references, whether taken together or separately, teach or disclose the claimed structural features, i.e., the "flat panels" without the indents, detents, etc., the "elevated ridges," and the "bell portion" providing for the absence of the indent/detent features in the panels which are taught in the prior art hot fillable bottles.

Additionally, Hayashi fails to teach that which the rejection relies upon in support of the rejection. For example, Hayashi specifically teaches in each of the five embodiments, structural modifications, in the form of vertexes that add structural support to the panels 3, the "stress absorbing zones", Column 5, lines 6-11. It is recognized that Hayashi fails to teach the "flat panels without modification," see page 3 of the Office Action. Instead, the description of the prior art cited in Hayashi is relied upon to teach the flat panels without modification. However, the rejection cannot properly rely on such a description of the prior art.

The very invention claimed and described in Hayashi is the vertex depressions or protrusions, which are the stress absorbing strips. These vertex depressions are the very thing that the present invention does not claim, and the absence of which provide the claimed "flat panels". Moreover, by describing the

vertex portions as providing an improvement over the prior art flat panels, and by clearly indicating that the prior art flat panels were deficient in maintaining the container shape, Column 2, lines 33-57, in the process of filling the container, Hayashi teaches that the way to overcome this deficiency is to provide the inventive features of the vertex protrusions. Thus, reliance on the prior art disclosure is misplaced because the Hayashi teaching is to deliberately not use the flat panels of the cited prior art, but to utilize the improvement, that is, the Hayashi vertex protrusions, which are the main feature of the invention. This is clearly a teaching away from both the prior art and from the present invention, and thus reliance on Hayashi is improper because it does not support the proposed combination.

References cannot be combined when one reference teaches away from their combination. MPEP § 2146.X.2 citing *In re Graselli*, 713 F.2d 731, 743, 218 USPQ 769, 779 (Fed. Cir. 1983). Although Hayashi indicates that, in the prior art, "flat surfaces as large as possible on the entire area of the panels" were used, Col. 2, lines 33-36, Hayashi teaches away from the prior art. Furthermore, Hayashi states that the prior art was ineffective because the surfaces would be deformed during filling at or above 85°C (185°F) and hence become ineffective at absorbing vacuum. Hayashi, col. 2, lines 43-57. Because the present invention discloses filling containers at approximately 180 - 185°F, but is not limited to that temperature range, ¶ 3, it is improper to combine Hayashi with Brady and Sugiura.

Neither do Sugiura et al. nor Brady teach the flat panels of the presently claimed invention. The numerous panels, for example the apparently octagonal or decagonal cross-sections of Sugiura et al. and Brady, do not disclose a four panel section or a generally rectangular transverse cross-section, as recited in Claims 1 and 21. While the rejection states that Ota is relied upon for teaching a four panel cross-section, Ota also teaches away from such a combination as argued below. Thus, a *prima facie* case of obviousness has not been established.

Additionally, the panels 32 of Brady extend within the body portion to corresponding panels 16 and 26, and section valleys 18 and 28, provide structural support, contrary to the teaching of the presently claimed invention.

Neither does Ota provide any teaching that avoids the use of the detent and indent features, see for example, Fig. 3 (square configuration) which also requires "one or more ribs 9," Column 4, lines 19-21. Thus, Ota also teaches against the proposed combinations.

Additional claimed elements recited in Claims 2-5 and 9 are asserted as being shown in the cited references, but in view of the showing that the rejection of independent claim 1 (and of Claim 21 and of new Claim 38, see below), those rejections are also respectfully considered to be improper.

Moreover, the features in the cited references are used in the rejection by picking and choosing only those elements that support the rejection of the claims so that the claimed inventive features are fit into a template after the invention has been appreciated. It is respectfully suggested that the proposed combination of references thus rely on improper hindsight reasoning to reach the conclusion of obviousness. No teaching suggestion or incentive to combine the references has been set forth that would render the claims obvious, *a priori* to the invention.

It is noted that the prior art method of including indents, detents, protruding and/or recessed surfaces to solve the problem of bottle deformation when the hot filled liquid cools is solved by the present invention by the means for isolating the four flat panel sections in the main body from the bell portion and from the base, thereby allowing the flexibility to the panel sections for moving between the bowed and planar configurations, and the functional features of the bell portion. These means for isolating may be provided by the first and second elevated ridges, now recited in dependent Claims 32-37, and in Claim 38.

In addition, the polypropylene limitation also distinguishes applicant's invention from the prior art. The prior art discussed by applicant in the specification with regard to vacuum panels, namely US Patent Nos. 4,863,046 to Collette et al, 5,704,503 to Krishnakumar et al, and 4,877,141 to Hayashi et al ("Hayashi"), discloses bottles made principally from PET. Applicant's invention

uses polypropylene, not PET, which US Patent No. 4,182,457 to Yamada et al ("Yamada") teaches is not suitable for hot filling. Yamada, Col. 2, lines 7-10.

Accordingly, Applicant respectfully submits that the obviousness rejection of Claims 1-9 has been overcome and that these claims are considered allowable over the prior art of record.

4. 35 U.S.C. § 103(a) Rejections of Claims 10-20

Claims 10-20 were rejected under 35 U.S.C. §103(a) as being unpatentable over 6,554,146 to De Groff et al ("De Groff") in view of applicant's admission of prior art, further in view of US Patent Nos. 5,987,901 to Visioli ("Visioli") and 5,616,353 to Wright et al ("Wright").

US Patent No. 4,990,382 to Weissenstein et al (Weissenstein) is discussed in the specification and discloses a container with an interior polypropylene layer, "a layer of adhesive, a barrier layer, another layer of adhesive, a relatively thick layer of regrind scrap containers, a third layer of adhesive and an outside gloss coat layer formed from plastic materials including ... nylon" ¶ 12. Weissenstein is relied upon for the proposition that it would be obvious to include an adhesive layer between the regrind layer and the inner layer disclosed in De Groff. However, the adhesive layer of Weissenstein is between a regrind layer and an outer layer, not an inner layer, thus the proposed rejection fails to set forth a *prima facie* case of obviousness.

Furthermore, there is no suggestion of a need or motivation for an adhesive layer in any of the cited references between the regrind layer and the inner layer. Thus, combining applicant's prior art with De Groff is improper. To combine teachings of different references, there must be a suggestion or motivation to combine references. MPEP § 2143 citing *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). Here, there is no motivation to combine De Groff with applicant's admitted prior art. Therefore, no *prima facie* case of obviousness has been established for independent claim 10. Accordingly,

Applicant submits that the obviousness rejection for claims 10-20 has been overcome and that these claims are allowable over the prior art of record.

5. 35 U.S.C. § 103(a) Rejections of Claims 21-31

The rejection of Claims 21-31 as being obvious further rely on the separate rejection of Claims 1 and 10. Because the rejections of Claims 1 and 10 have been shown above to be improper, Applicant respectfully submits that Claims 21-31 are also allowable, because they recite at least those inventive features that are argued above as rendering Claim 1-20 allowable.

6. New Claims 32-38 are Also Allowable

The features of dependent Claims 32-37 more precisely recite the means for isolating the container body, bell and base portions, and are allowable at least for the reason that Claims 1 and 21, upon which they depend, are allowable.

It is respectfully submitted that Claim 38 is allowable because it recites all of the elements of Claims 1, 32 and 33, which have been shown above to be allowable.

CONCLUSION

In view of the foregoing, reconsideration and withdrawal of the outstanding rejections are respectfully requested and an indication of allowable subject matter is earnestly solicited

Respectfully submitted,

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